

(mm): total length 124; tail length 52; hind foot 9; ear (notch) 23; and forearm 61. This is the third report of the Big Free-tailed Bat in San Diego and the fourth occurrence in California (Shamul, Proc. U. S. Nat. Mus., 78:19, 1931; Huey, J. Mamm., 13:160, 1932; and Huey, J. Mamm., 35:435, 1954).

Howell (J. Mamm., 1:112, 1920) proposed that *T. macrotis* needs high points from which to begin flight. Both of Huey's records were from comparable high locations and the capture of our specimen on the second story may support Howell's contention. The bat is now a specimen (No. 60, alcoholic) in the Natural History Museum of the University of San Diego.

In September 1955 a adult female of the Spotted Bat, *Euderna maculatum* was found hanging from a second story window sill by Bernice Farrens at the University of San Diego. The specimen was collected, identified and preserved (alcoholic), and set aside. It was not until recently that the bat was measured and positively identified. The external measurements of this bat were (mm): total length 102; tail length 43; hind foot 11; tragus 14; ear (notch) 39; and forearm 52. Although this rare bat has been reported throughout California, none, to our knowledge, have been reported in San Diego County. This bat is now a specimen in the Natural History Museum of the University of San Diego (No. 61).

Special thanks are due Bernice Farrens for kindly lending us the specimen of the Spotted Bat.

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Accepted for publication March 9, 1973.

#### A NEW GENUS AND SPECIES OF HAPLOPORID TREMATODE (HAPLO- PORIDAE: TREMATODA) FROM AUSTRALIAN MULLET

While in the Parasitology Department at the University of Queensland, Brisbane, Australia (1970-71), I found some haploporid trematodes possessing an undivided ceum in the intestines of mullet collected in the Brisbane River. A new subfamily with two new genera was established for them (Martin, Proc. Helm. Soc. Washington, 40:112-117, 1973). This paper adds another genus and species to that subfamily.

The worms were fixed without pressure in hot 5 percent formalin, cleared in methyl benzoate and mounted in Canada Balsam. Measurements are expressed in microns unless otherwise indicated. Averages are in parentheses.

#### *Paraunisuccoides*, new genus

*Diagnosis:* Body fusiform, tegument spined, oral sucker subterminal, acetabulum in anterior half of body. Prepharynx elongate, pharynx well developed at or slightly posterior to acetabular level, esophagus shorter than prepharynx, ceum elongate, partially divided posteriorly. Vitellaria elongate cords in posterior half of body. Testis in hind body, ovary immediately anterior. Laurer's canal and seminal receptacle uterinum present. Uterus between ovary and hermaphroditic duct. Eggs relatively large and few. External seminal vesicle saccular. Internal seminal vesicle, prostate cells, prostate bulb, a portion of uterus, hermaphroditic duct with denticulate pads, and muscular ring enclosed in hermaphroditic sac. Genital pore immediately anterior to acetabulum, transversely elongate.

*Type species:* *P. lobolectithus*, new species.

#### *Paraunisuccoides lobolectithus*, new species

Figures 1 and 2

*Specific diagnosis:* Description based on two ovigerous specimens with the characters of the genus. Body spines more numerous anteriorly, both suckers ringed with spines. Body length 1.85, 2.07 mm; body width 266, 406. Eyespot remnants present. Oral sucker 96, 112 long and 100, 112 wide. Acetabulum 93, 143 long and 78, 156 wide. Prepharynx 426, 684 long. Pharynx 109, 112 long and 131, 137 wide. Esophagus 112, 249 long, ceum 390, 518 long, composed of large cells. Unicellular glands along esophagus and prepharynx, the latter's ducts passing to lip of oral sucker. Genital pore midventral anterior to acetabulum, crescent shaped in one specimen. Hermaphroditic sac 258, 286 long and 96, 118 wide. Hermaphroditic duct lined with pads bearing tiny denticles. Internal and external seminal vesicles filled with sperm. Testis near posterior end of body, 239, 345 long and 168, 202 wide. Ovary oval 109, 140 long and 100, 109 wide. Eggs with thin yellow shells, partially collapsed so that measurements are near approximations, 71-93 (86) long and 56-59 (58) wide. Excretory bladder Y-shaped with arms reaching ovarian level.

*Holotype:* No. 7114, deposited in the Hancock Parasitology Collection, University of Southern California.

*Host:* *Mugil cephalus* L., sea mullet.

*Site:* Intestine.

*Type locality:* Brisbane River, Brisbane, Queensland, Australia.

*Paraunisuccoides* differs from *Unisuccoides* mainly in the nature of the vitellaria, ribbon-like in the former and follicular in the latter. *Paraunisuccoides* also has a longer prepharynx, pads of hermaphroditic duct with denticles instead of spines, a more restricted uterus and a shorter excretory bladder.

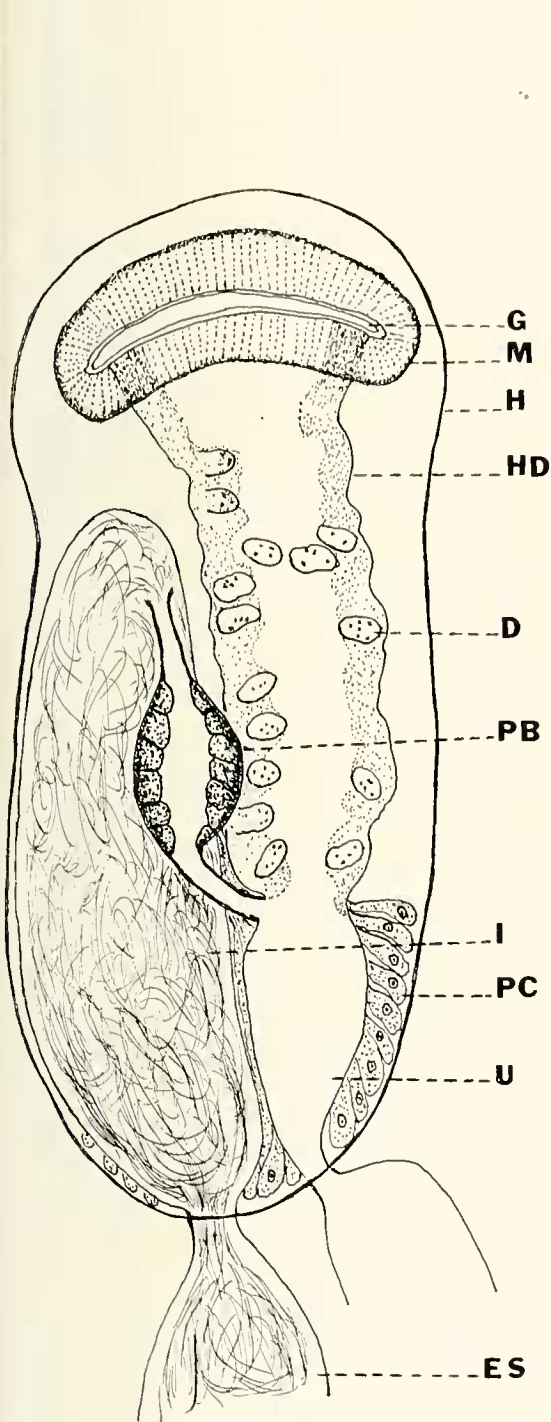


Figure 1. Terminal genitalia of *Paraunisaccoides lobolecithus*, new species. D, denticulate pad; ES, external seminal vesicle; G, genital pore; H, hermaphroditic sac; HD, hermaphroditic duct; I, internal seminal vesicle; M, muscular ring; PB, prostatic bulb; PC, prostate cells; U, uterus.

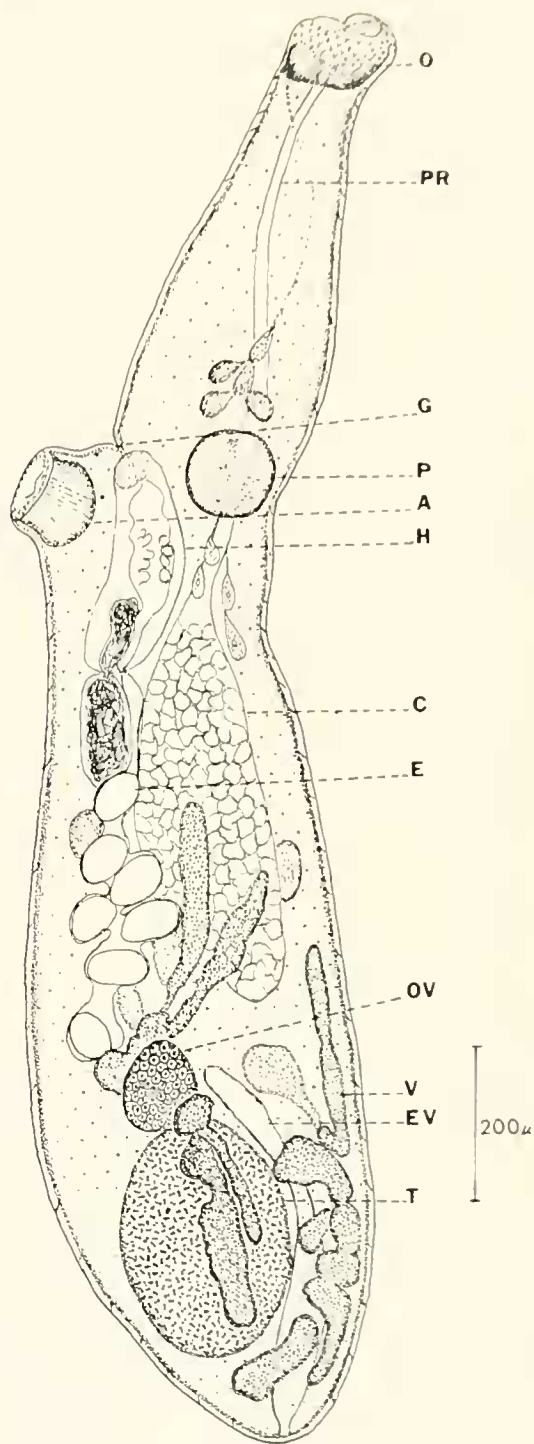


Figure 2. Lateral view of *Paraunisaccoides lobolecithus*, new species. A, acetabulum; C, cecum; E, egg; EV, excretory vesicle; G, genital pore; H, hermaphroditic sac; O, oral sucker; OV, ovary; P, pharynx; PR, prepharynx; T, testis; V, vitellaria.

The subfamily Unisaccinae is emended to include species with elongate vitellaria.

I am greatly indebted to J. F. A. Spret, Head of the Parasitology Department, University of Queensland, for the use of laboratory facilities and encouragement in many ways; to John Pearson, Reader in Parasitology for assistance; to Jim Davie for help in

collecting fish; and to the National Science Foundation for support (NSF 66962).

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Accepted for publication March 23, 1973.

## EDITORIAL: CRITICAL REVIEW OF MANUSCRIPTS

As indicated in the Instructions for Authors (inside back cover), all manuscripts submitted to SCAS BULLETIN are reviewed by referees who critically read for scientific content, originality, and clarity of presentation, and who assist the editors in making judgments as to acceptability for publication. The reviewers also assist authors by offering constructive suggestions which may lead to improvement of the text or illustrations of manuscripts. By contribution of their time and professional expertise the referees measurably enhance the quality of SCAS BULLETIN.

In behalf of our readers, authors, and ourselves we thank the following reviewers for valuable editorial assistance in recent months: Phillip A. Adams, Louis F. Baptista, James A. Blake, Thomas E. Bowman, Bayard H. Brattstrom, James M. Brennan, Joseph A. Chapman, Fenner A. Chase, Murray D. Dailey,

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## ANNOUNCEMENT: 1974 ANNUAL MEETINGS

The 1974 annual meetings of the Southern California Academy of Sciences will be held on May 3 and 4, 1974 at California State University, Fullerton. Technical papers are solicited from the fields of natural and social sciences.

**Abstracts** of no more than 150 words must be typed on  $3 \times 5$  cards and *must be received no later than March 22, 1974*. The first line of the abstract is to include author(s), student or professional, preferred section (see below), and type of projection equipment, if needed. **Send abstracts to:** David L. Walkington, *Dept. Biological Science, California State University, Fullerton, California 92634.*

**Technical sessions**—Anthropology, Archaeology, Botany, Earth Science, Entomology, Experimental Biology, Folklore, History, Invertebrate Zoology, Marine Science, Vertebrate Zoology, Psychology, Economics, and Geography (other

sections will be opened to accommodate demand). Special interest symposia will be presented.

**Student awards** will be presented in the Natural Science and Social Science Divisions. First award in each division will be \$150.00; second award in each division \$75.00.

**A.A.S. Grant in Aid of Research**—\$150.00 will be awarded to a high school, undergraduate, or graduate student submitting the most outstanding research proposal in the sciences. *Application forms available from Takashi Hoshizaki, Dept. Biological Science, California State University, Fullerton, California 92634.*

**Banquet**—The annual banquet will be held the evening of May 4; presentation of awards will be made at this time. *Speaker:* Stanley M. Greenfield, Assistant Administrator, Environmental Protection Agency; *Topic:* General problems of environmental protection: evolution and enforcement.